

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent application of: **KANG, Seogchan, et al.**

For: A DUAL SELECTION BASED, TARGETED GENE DISRUPTION METHOD FOR
FUNGI AND FUNGUS-LIKE ORGANISMS,

the specification of which is being transmitted herewith.

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

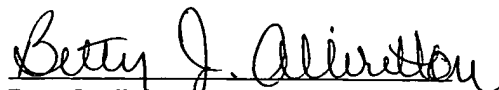
Attached are Forms PTO/SB/08A and 08B (formerly Form PTO-1449) listing the relevant art known to the applicant herein. Copies of non-U.S. patents are enclosed. References that are U.S. patents are not required to be submitted. The Examiner is requested to consider the references and make them of record.

Applicants disclose herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose. Legible copies of all items listed in Forms PTO/SB/08A and 08B (formerly Form PTO-1449) accompany this information statement, except those identified above.

=====

CERTIFICATE OF MAILING BY EXPRESS MAIL

I hereby certify that this document and the documents referred to as enclosed therein are being deposited with the U.S. Postal Service in an envelope as "Express Mail Post Office to Addressee" addressed to: Box NEW APP - FEE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, prior to 5:00 p.m. on the 12 day of February, 2004.



Betty J. Albritton
Express Mail Label # EV 298923308

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. § 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. (Notice of January 9, 1992, 1135 O.G. 13-25, at 25.)

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Edmund J. Sease', with a stylized, wavy flourish at the end.

EDMUND J. SEASE, Reg. No. 24,741
McKEE, VOORHEES & SEASE, P.L.C.
801 Grand Avenue, Suite 3200
Des Moines, Iowa 50309-2721
Phone No. (515) 288-3667
Fax No. (515) 288-1338
CUSTOMER NO: 27407

- bja -

Attorneys of Record

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	KANG, Seogchan et al.
		Art Unit	
		Examiner Name	
Sheet 1 of 2	Attorney Docket Number	P06604US00	

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US- 4,885,249	12/04/1989	Buxton et al.	
	2	US- 5,464,764	11/07/1995	Capecchi et al.	
	3	US- 6,090,554	07/18/2000	Woychik et al.	
	4	US- 6,255,115 B1	07/03/2001	Beijersbergen et al.	
	5	US- 6,503,712 B1	01/07/2003	Thukral	
	6	US- 6,562,624 B2	05/13/2003	Adachi et al.	
	7	US- 6,673,567 B2	01/06/2004	Sharpe et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Appear	T ⁶
	8	WO 02/00896 A2	01/03/2002	Penn State Research Foundation; Romaine, et al.		

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if examiner considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.

⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	
		Filing Date	
		First Named Inventor	KANG, Seogchan, et al.
		Group Art Unit	
		Examiner Name	
		Attorney Docket Number	P06604US00
Sheet	2	of	2

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	9	Donoho, Greg, et al. "Analysis of Gene Targeting and Intrachromosomal Homologous Recombination Stimulated by Genomic Double-Strand Breaks in Mouse Embryonic Stem Cells" Molecular and Cellular Biology, July 1998, p. 4070-4078	
	10	Gelvin, Stanton B. "Agrobacterium-Mediated Plant Transformation: the Biology behind the "Gene-Jockeying" Tool" Microbiology and Molecular Biology Reviews, March 2003, p. 16-37	
	11	Hellens RP, et al. "pGreen: a versatile and flexible binary Ti vector for Agrobacterium-mediated plant transformation." Abstract Plant Mol. Biol. April 2000	
	12	Krysan, Patrick J., et al. "T-DNA as an Insertional Mutagen in Arabidopsis" Genomics Article, The Plant Cell, Vol. 11, 2283-2290, December 1999	
	13	Piers, Kevin L., et al. "Agrobacterium tumefaciens-mediated transformation of yeast" Proc. Natl. Acad. Sci. USA, Vol. 93, pp. 1613-1618, February 1996 Microbiology	
	14	Pratt, Robert J., et al. "Improving the efficiency of gene replacements in Neurospora crassa: a first step towards a large-scale functional genomics project" Fungal Genetics and Biology 37 (2002) 56-71	
	15	Sullivan, Thomas D., et al. "Agrobacterium tumefaciens Integrates Transfer DNA into Single Chromosomal Sites of Dimorphic Fungi and Yields Homokaryotic Progeny from Multinucleate Yeast" Eukaryotic Cell, Dec. 2002, p. 895-905	
	16	Tzfira, Tzvi et al. "The Agrobacterium-Plant Cell Interaction. Taking Biology Less from a Bug ^{1,2} " Plant Physiology, November 2003, Vol. 133, pp. 943-947	
	17	Van Attikum, Haico et al. "Genetic requirements for the targeted integration of Agrobacterium T-DNA in Saccharomyces cerevisiae" Nucleic Acids Research, 2003, Vol. 31, No. 3, 826-832	
	18	Wei, Li, et al. "Agrobacterium-mediated transformation: state of the art and future prospect" Chinese Science Bulletin, Vol. 45, No. 17, September 2000	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.